



## **Sighting a Royal Vehicle**

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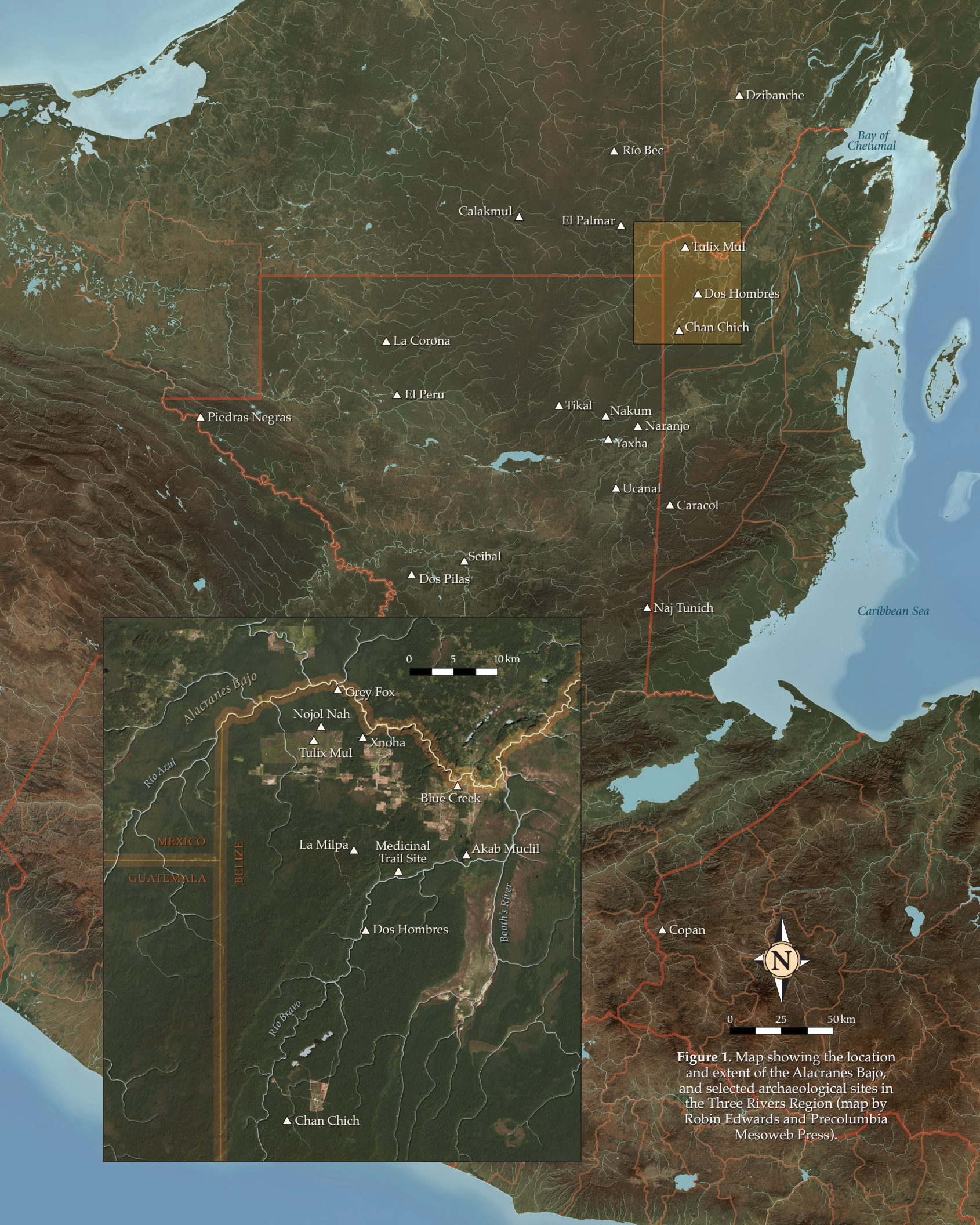
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**Figure 1.** Map showing the location and extent of the Alacranes Bajo, and selected archaeological sites in the Three Rivers Region (map by Robin Edwards and Precolumbia Mesoweb Press).



# Sighting a Royal Vehicle: Observations on the Graffiti of Tulix Mul, Belize

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The secondary modification of walls and architectural spaces by the incision of small designs and figurative elements—collectively referred to as graffiti—is a well known and widespread practice of the ancient Maya. The motivations behind these etched markings and the subject matter of these depictions are rarely clear, since there are a multitude of impetuses, conditioned in large measure by the aptitude of the individual to render a visually intelligible message when that was the intent. Well-preserved and intelligible figurative graffiti can provide a wealth of information on ancient Maya society, whereas abstracted forms and combinations of lines defy interpretation. Often overlooked and poorly documented, graffiti are rarely given the treatment that they deserve, with the exception of a few landmark studies (e.g., Trik and Kampen 1983; Vidal Lorenzo and Muñoz Cosme 2009; Żrałka 2014). The recent discovery of a graffito depicting a royal palanquin at the site of Tulix Mul in northwestern Belize is a significant find, and we will describe the site and the circumstances of discovery before turning to a review of palanquins in Classic Maya society and their depictions in ancient imagery. Other examples of the same palanquin are introduced, including another depicted in graffiti and one painted on a polychrome bowl. Together these allow us to identify the particular palanquin, which has considerable implications for the historic event commemorated in this graffito and the place of Tulix Mul in the networks that connected powerful neighbors to the north and south.

## Background

The archaeological site of Tulix Mul was once the seat of an ancient Maya community on the eastern edge of the Alacranes Bajo in northwestern Belize. Geographically it is located in the Three Rivers Region, an area known for its numerous archaeological sites (Figure 1). Settlements within the Three Rivers Region varied greatly in size and configuration ranging from large urban centers (such as La Milpa, Dos Hombres, and Blue Creek) to small secondary centers focused on agricultural production (Akab Muclil and the Medicinal Trail Site). The site of Tulix Mul is one of the latter, the opulent and well-built homestead of an affluent group that controlled agricultural production on the margins of the imposing Alacranes Bajo that spans the borderlands between Belize, Guatemala, and Mexico. Tulix Mul was in proximity to the larger sites of Xnoha and Grey Fox, and forms part of the greater settlement area focused on the site of Nojol Nah.

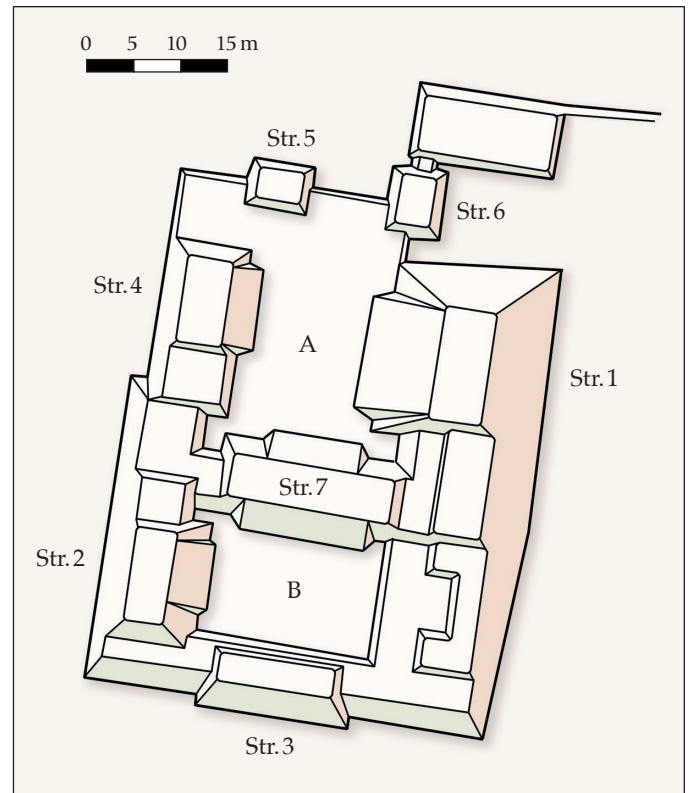
This region saw complex interaction among polities, especially in the Early Classic period. The larger site of Nojol Nah is located about a kilometer to the northeast of Tulix Mul and exhibits a large pyramid-plaza complex, built in the Early Classic (Tzakol 1/2). The termination of this structure in the latter part of the Early Classic (Tzakol 2/3) and the cessation of large public architecture indicates a rupture in power at the site and in the region (Guderjan et al. 2016). Also at Nojol

Nah, a large chultun was excavated containing Tzakol 1/2 ceramics that are stylistically linked to Naranjo. This contained a wide range of special finds such as a mace scepter, figurines, bone needles and awls, carved shell objects, and many broken polychrome vessels (Brown et al. 2014). This chultun was then sealed by a small but complex masonry residence built atop its opening. The residence continued to be occupied well into the Late Classic period and yielded numerous human burials, of individuals in very good dietary health (Plumer 2017). As such, whereas the political aspirations of Nojol Nah may have been curtailed by the middle the Early Classic, occupation of the site continued for several centuries.

At the same time we see the rise of Xnoha, only a few kilometers to the east, as a minor regional power that probably controlled territory in an arc of about 7 km, including both Nojol Nah and Tulix Mul. While bringing them under its sphere of influence, Xnoha built grand pyramids, an acropolis, and imposing range structures. Two of the pyramids were adorned with Early Classic masks on both sides of the central stair. Significantly, all the sites on the east side of the Alacranes Bajo are very small when compared to the large sites overlooking the west side (Šprajc 2008). Despite the withdrawal of power from these nodes at the end of the Early Classic, as manifested in the termination and cessation of monumental architecture, the economic value of the agricultural resources of the eastern side of the bajo were important enough to continue and expand occupation and agricultural activities into the Late Classic.

### Tulix Mul

The existence of Tulix Mul was noted in 2010 by members of the Maya Research Program while mapping an area that had recently been burnt by local farmers (Hammond 2012). Following this, the site was excavated during the 2012, 2013, and 2014 field seasons (Greaves and Guderjan 2015; Hammond 2013, 2014). Tulix Mul was situated in a favorable position to exploit the resources of the Alacranes Bajo and was also along the waterway defined by the Río Azul, one of the major tributaries of the Río Hondo. Connected to these waterways the inhabitants of Tulix Mul had access to the Bay of Chetumal to the northeast and goods from the Caribbean, whereas the Río Azul provided an artery into the central Peten via the Holmul Valley to the southwest. In addition to these waterways were overland roadways that together formed a north-bound corridor between the sites of the eastern central lowlands (to the south) and sites in southern Campeche (to the north), including El Palmar and Dzibanche (see Helmke and Awe 2016; Martin and Velásquez Gracia 2016; Tsukamoto and Esparza Olguín 2015). It is this corridor that was preferentially employed during north-south travels in the eastern central Lowlands, as revealed by the glyphic texts of El Palmar and Naj Tunich, extending



**Figure 2.** The Tulix Mul group (plan by Christophe Helmke, based on surveys by Gail Hammond and Mark Wolf).

all the way to Copan in the south (MacLeod and Stone 1995:166, Figs. 7, 8; Tsukamoto and Esparza Olguín 2015:35).

Tulix Mul is a monumental courtyard group built atop a raised platform, consisting of a series of patios enclosed by vaulted masonry architecture, surrounded by residential house mounds (Figure 2). The average elevation of the platform is 73 m above mean sea level, and in some parts as high as two meters above the surrounding terrain. The group is made up of two courtyards, a larger and more open Courtyard A to the north and a smaller Courtyard B of more restricted access to the south. A series of structures surround and define the perimeters of these courtyards. The main point of access was via the northern edge of Courtyard A (between Structures TM-5 and TM-6), with pyramidal and presumably special-function structures defining the eastern and western sides (including TM-1 and TM-4). The raised and vaulted Structure TM-7 divides the two courtyards and serves as a diminutive *audiencia* structure, with administrative functions and restricting access to the more private Courtyard B. This leaves the multi-room and vaulted structures delineating the southern, eastern, and western sides of Courtyard B (i.e., Strs. TM-1, 2, 3) to serve residential functions for the inhabitants of the group. Despite the predominantly residential function of Courtyard B, one of the structures





**Figure 3.** Photograph of the intact vaulted room of Str. TM-2, with its plastered walls and damaged portion of bench at the southern end of the room (photograph by Gail Hammond).

or rooms undoubtedly also served as what might be called a reception hall for visiting dignitaries.

Before excavations were initiated, it was clear that the site had suffered depredations from looting. As many as four looters' trenches have affected the eastern structure of Courtyard A, and another was run into Structure 2 from the back, into its vaulted room. The remaining structures did not exhibit any traces of looting. As part of the three seasons of excavations conducted at the site, six structures were tested and partially exposed, revealing a complex architectural sequence, as well as special deposits including 3 caches and 12 formal burials. Based on associated ceramic materials we were able to determine that the site was inhabited from the Early Classic to the Terminal Classic (c. AD 250 to 850). Excavations at Str. TM-2 determined that the initial phases of construction date to the middle part of the Early Classic (c. fourth century). Construction-related pottery belonged to the Tzakol 1/2 complex, and



**Figure 4.** Overview of painted west wall of Str. TM-2 (photograph by Gail Hammond).

post-construction pottery could be assigned to Tzakol 2/3 and later. The excavation revealed an intact vaulted room (Figure 3). The room is oriented north-south and is accessed by a central doorway on the eastern side. The looters' trench broke into the southwestern portion of the room and partly destroyed the southern part of the west wall. The room measures c. 6.3 m (N-S) x 1.7 m (E-W) and the maximum height of the vault above floor level is 2.6 m. The majority of the room is filled with a U-shaped bench, with a smaller inset at the door. In its terminal phase, the bench measured c. 25 cm above the floor level.

Based on the preserved sections of plaster it is clear that most of the surfaces of the room were once painted in shades of red-orange ochre whereas the entirety of the surface of the U-shaped bench that filled the room was painted in dark red hematitic pigment. This has survived especially in the corners and along the base of the walls, whereas the pigmentation on the walls has been preserved in a much more irregular manner. Stunningly, the western wall once bore a polychromatic mural that today is only preserved in patches (Figure 4). In addition, a broad black-painted band adorned both the riser of the interior bench and part of the wall





a



b

**Figure 5.** (a) Multiple painting and plastering events, West Wall, Str. TM-2; (b) the successive refurbishments of the bench, showing the multiple construction phases exposed in the axial test excavations (photographs by Pieta Greaves).

behind it, below the polychromatic mural. This wall showed evidence of multiple episodes of plastering and sequential painting events (Figure 5a).

Testing of the bench also revealed that it was built in several construction phases (Figure 5b). Below the penultimate phase a dedicatory cache was found in the core of the substructural platform that was sealed by more than 1200 flakes of lithic debitage (Hammond 2016:415). The main cache included organic materials that were once wrapped in a cloth bundle—the impression of the cloth being preserved on the masonry binder (Greaves and Guderjan 2015) (Figure 6a). The terminal phase of the bench—which was raised by 6 cm in relation to the foregoing, penultimate, phase—contained a sherd of a Zacatel Cream-polychrome vase (Figure 6b). The beautiful mountain depicted on this sherd is highly



a



b

**Figure 6.** (a) Impression of woven textile material—once containing a cache of perishable material—on mortar from below the penultimate phase bench (photograph by Pieta Greaves); (b) Zacatel Cream-polychrome sherd found within the core of the terminal phase bench (the sherd measures 5.7 cm wide) (photograph by Gail Hammond).





a

**Figure 7.** Documentation of the graffiti: (a) tracing using transparent acetate; (b) photography with raking light (photographs by Pieta Greaves).



b

reminiscent of the manner in which royal Codex Style ceramics were painted at the court of Calakmul in the Late Classic (see Boucher 2014; García Barrios 2011). The inclusion of this sherd in the construction core of the terminal bench not only provides evidence of interactions with the powerful Snake dynasty to the north, but also a relatively secure dating for the latter phase of architectural refurbishments in the second half of the seventh century.

Conservator Pieta Greaves examined the painted wall in 2014 and discovered multiple instances of incised graffiti (Greaves and Guderjan 2015). These graffiti were documented by a combination of methods including tracing on transparent acetate (Figure 7a) and by securing a series of photos with differential artificial raking light to emphasize the faintly incised details (Figure 7b). There were burnt patches on the wall and on the central portion of the bench in front of it, but not in the rest of the room, which may indicate that the room may also have witnessed religious observations involving fire rituals. The vaulted room and its entry chamber were eventually filled in with large rubble indicating that the room was purposefully decommissioned. The aforementioned burning may have been part of the associated termination rituals. Despite the room of Structure 2 being filled, the outer structure was refurbished and the rest of the Tulix Mul courtyard continued to be used and populated until the Terminal Classic (Hammond 2016).



## The Graffiti and Mural of Tulix Mul

The graffiti of Structure TM-2 are found exclusively on the walls, predominantly at standing height and especially on the western wall, facing the central axial doorway. Based on the distribution of the graffiti it is clear that these were preferentially disposed so as to be closest to the entrance, providing the most natural lighting during daytime hours. In all, 11 separate groupings of graffiti have been identified in the room. Based on careful examination of the graffiti during the conservation of the murals, Pieta Greaves was able to determine that they were likely made with a hard and sharp tool, such as a pointed lithic. Whether they were all made by the same individual(s) during the same event is unknown, but certainly some of the graffiti span over two exposed sections of superimposed plastering. This suggests that the later graffiti were incised when parts of the plastering had already fallen into decay and the room may not have been utilized for its intended primary purpose (Hammond 2016:407). Alternatively, they could also represent two distinct phases of graffiti, each associated with the respective phases of plastering.

As is the case with graffiti anywhere in the Maya world, many of the elements represented are highly schematic, stylized, and often indistinct, and at times it is not readily apparent what they are supposed to represent. Whether the partiality and schematic nature is owed to the manner of execution, poor preservation, inadequate modern documentation, or abortive graphic renditions is equally unclear. Nonetheless, the apparent degree of abstraction that these schematic graffiti bespeak has prompted some researchers to view them as the pure product of boredom, whereas others have pointed to ritual life, intoxication, and entoptic phenomena associated with altered states as the impetus (see Žračka 2014:119-222). In the present case, at Tulix Mul we have a combination of abstract and schematic elements as well as clearly figurative graffiti, the two happily cohabitating the same wall.

The groupings are restricted to the west wall of Room 1 and are briefly described in turn (see Hammond 2016:595-600). Group 1 is one of these abstract forms and can be described as an elongated section extending to the left, curving onto itself to form two circular forms, above and below, whereas the right portion terminates in a large rounded shape that is defined by a jagged line on one side. A series of smaller crisscrossed lines occur above this principal form and faint, rectangular shapes extend below. Group 2, which is just to the north of Group 1, has suffered extensively from the spalled and damaged plaster surface. As such, only the extremities of the central form remain on either side of the spalled area. Based on what remains this graffiti has been interpreted as representing a stylized fish (Hammond 2016:595). Groups 3 and 4, just to the south of Group 1, together once formed a complex scene, but only traces of

it remain today. At the top, a squared form with circular depressions in each corner and an elongated element in the middle constitutes an important feature of Group 3. Below and to the left a large squared form may delineate a space or render the schematic outline of a structure (Figure 8a). Further down along the right edge of the group is an elongated and rounded form that may have once depicted a human head in profile. More to the left is Group 4, which is dominated by a rather crude face rendered simply as two circular depressions for eyes and a longer horizontal slit for a mouth. In its execution it is most similar to petroglyphs found throughout the Maya area that depict simple faces. These may date predominantly to the Late Classic, based on the contexts in which they occur and associated artefacts (Helmke et al. 2003:119-121). At Tulix Mul this simple petroglyphic face is enclosed in a wavy line that provides an approximation of a human, albeit nearly ghostly form. In Group 5 a sinuous line that resembles a serpentine form is juxtaposed to an elongated and nearly rectangular one (Figure 8b).

Group 6 is the one that breaks the pattern of the other graffiti at Tulix Mul since it is the clearest figurative scene at the site and one rendered near the center of the wall, along the primary axis of the room. It represents a relatively small palanquin, replete with a large anthropomorphic effigy placed across the top (Figure 8c). Careful examination has also revealed faint traces of human figures that once populated the scene around the palanquin. On account of the importance of this graffiti, we will return to it and focus the remainder of the paper on its interpretation and the resulting implications. Group 7 is a sequence of circular elements in a row, leading to a pair of larger circles at the top, with a woven element below resembling an item of regal regalia and the glyph for *polhp* "mat," usually taken to serve as a symbol for royal authority (Figure 8d) (Thompson 1950:107). Below the mat sign is a complex cluster of intersecting lines creating another unidentified form. Group 8 is a set of near-parallel, intersecting lines that together form what may be two overlapping bands, forming an X-shaped figure. In Maya iconography this type of sign occurs as part of sky bands and may represent the ecliptic, although in this context it is unclear whether it has the same meaning. Much of Group 9 has been affected by spalling plaster and as a result very little can be said about it with certainty. But from what remains it appears to represent a standing human form, with arms bent and bound, and the same rope connected to the side of the loincloth and reaching down to the ankles. Group 10 is disposed over a square field or area and includes the outlines of what may have been a structure and/or an individual, but these are rendered in faint lines and therefore cannot be commented upon further. The final Group 11 is a very fine set of diagonally intersecting lines, without clear meaning.





a



c



b



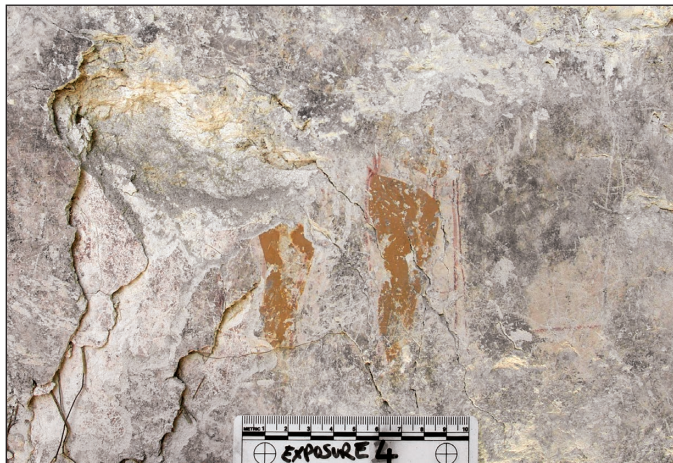
d

**Figure 8.** A selection of photographs of the graffiti at Tulix Mul: (a) Group 3 quadrangular form; (b) Group 5 serpentine form; (c) Group 6 palanquin; (d) Group 7 string of circles and plaited motif (photographs by Pieta Greaves).





a



b

**Figure 9.** The remains of the polychrome mural painted on the west wall of Str. TM-2: (a) detail of Area 7 showing parts of the profiles of human figures and (b) part of Area 4 preserving the legs of two standing figures (photographs by Pieta Greaves).

In addition to the engraved graffiti, there are a series of painted elements, preserved in nine different areas of the west wall (Figure 4), including parts of a poorly preserved processional scene in red, pink, light brown, yellow, and black. Only parts of the flesh-colored faces (Area 7) as well as the legs and segments of the loin-cloths of two individuals (Area 4) are preserved today, but the detail suggests that this was once a much larger and accomplished scene (Figure 9) (Hammond 2016:403, Fig. 251). The scarcity of murals in northern Belize is due to the fact that superstructural buildings were usually destroyed in preparation for new construction phases, such as at Str. 9 at Blue Creek (Guderjan 2004). The preservation of the Tulix Mul mural was due to the careful and unusual infilling of the room instead of the intentional destruction of the superstructure. From what is

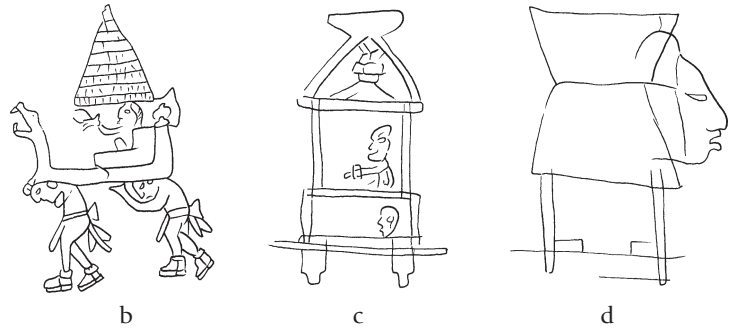
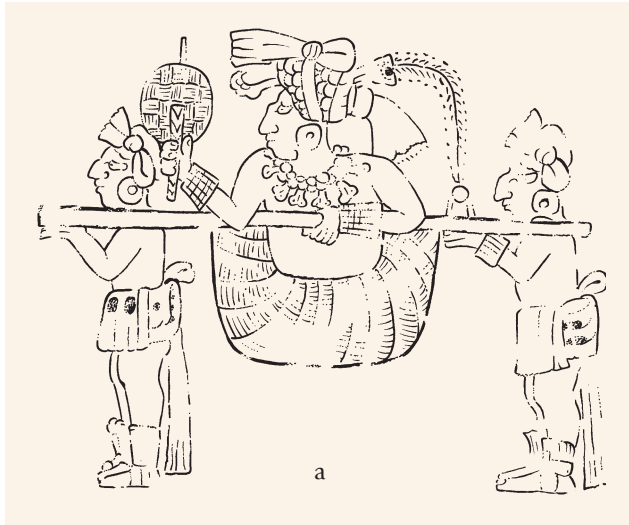
preserved, we can surmise that the painted mural once depicted a group of individuals, perhaps as part of a courtly scene, such as a royal audience. Much as with the graffiti, the painted areas were concentrated near the middle of the western wall, giving preference to natural daylight. Whether this mural was an integral part of the decoration of the room or added at a later date has not been adequately resolved as yet. Nevertheless, since some of the graffiti overlaps and intrudes upon the painted scene, it seems probable that the painted mural was added at an earlier date and may have served an integral function to that of the room, whereas the graffiti were certainly added at a later date. Also in terms of subject matter we cannot see that there is any overlap between that of the painted mural versus that of the graffiti, again suggesting two differing phases of decoration or embellishment. Based on the dating of the architecture on the basis of stratigraphy and associated ceramics, the painted mural must date to the latter part of the Early Classic, during the height of power of the sites in the area, including Nojol Nah, the nearest center.

### Palanquins in Maya Art

Ancient Maya palanquins are best known from their depiction in Classic Maya imagery since these were made of perishable materials, especially wood, and have therefore succumbed to the tropical climate. No clear material evidence of these remain, with the possible exception of plaster casts made of selected materials accompanying the deceased of Burial 195 at Tikal. There, the tomb had filled with fine-grained sediment in the course of flooding, thereby sealing artifactual materials and perishable objects in this dense and hardened stratum. Excavators, pouring plaster of Paris into the voids that had formed in the sediment, were thereby able to reveal the form of perishable items, including statuettes of deities, vessels of wood and gourd, woven baskets, most of a large protective ballgame yoke, the funerary bier that held the corpse, a small throne with glyphic medallions, and the panels of a carved box (see Moholy-Nagy and Coe 2008:Figs. 226-235). It is this throne and the latter planking that we suggest may have been part of a smaller palanquin.

Based on extant depictions of palanquins in Classic Maya imagery, we can describe these vehicles as being subsumed under two categories. The smaller versions were designed to carry a single individual and are not considerably larger than a seat or chair to be carried by a limited number of individuals (Houston 1998:Fig. 5a-b; Żrałka 2014:125) (Figure 10a-b). In the Maya area, depictions reveal that a variant of these smaller litters were essentially hammocks or slings mounted on longitudinal poles borne between porters (Figure 10a). In stratified societies the world over, these smaller litters are typically carried by no more than two to four





**Figure 10.** Simple palanquins in Classic Maya iconography: (a) a hammock-like litter shown on vase from the Nebaj area (K0594); (b) graffiti at Río Bec with snake-headed litter (after Žračka 2014:Pl. 40c); (c–d) Tikal graffiti depicting small structure-like palanquins with supports and carrying poles visible (after Trik and Kampen 1983:Figs. 23d, 72) (drawings by Christophe Helmke).

porters, yet smaller groups of porters may travel along, to relieve each other in turn. The most ancient still-extant examples are the well-preserved sedan chairs of ancient Egypt, and these continue to be used to a limited extent in parts of India today (Anonymous 2002). Bridal litters (known as *jiān yú*), in auspicious shades of red, usually carried by four porters, were also a common feature of imperial China. The patrilocal transfer was accompanied by the “Bridal Litter Song” (*xīnniáng jiào gēqǔ*) wherein porters jostled and swayed the litter to assuage the bride, while singing a song that was meant to provide sympathetic advice (Zhang 1988). Until the introduction of the bulletproof Popemobile in 1978, popes were traditionally carried on a special ceremonial litter known as the *sedia gestatoria* (“carrying chair”), conveyed by as many as twelve bearers, six on each lateral carrying pole (Hebermann 1913:679).

In addition to carrying people, palanquins were also used to transport deity effigies, for instance as part of celebrations in ancient Egypt (e.g., the Beautiful Feast of Opet), India (e.g., the final day of the Ganesh Chaturthi), and those observed by the Catholic Church (especially the Holy Week processions). In Japan, such palanquins are known as *mikoshi* “portable shrine” (or reverentially as *ō-mikoshi*), where they are a common feature of Shinto rituals and serve to transport deities as part of regional celebrations. Tied to such regionalism are differing traditions, including the highly distinctive ways of bearing or shouldering these portable shrines, as well as riotous waving and jostling to amuse the spirit that is being borne (Ono and Woodard 1992:26–28).

The larger palanquins are much more substantial constructions involving broad platforms to be carried by a more extensive group of porters. In imperial China, for instance, such litters (known as *guan jiào*) were in essence small palatial structures constructed atop of such platforms, draped with silk curtains. Similar, house-like constructions are known from several depictions

in the Maya area, many of which are found as graffiti (Houston 1998:Fig. 5; Žračka 2014:125–126, Pl. 37). These are usually shown with the carrying poles protruding at either end as well as tau-shaped supports below (Figure 10c–d). The largest palanquins in the Maya area were open constructions, with the platform sustaining a cushioned seat for the monarch and a large overarching deity effigy (Stone and Zender 2011:99). At times, this platform was built in terraces or tiers, as an emulation of a stepped substructure. The large effigy that decorated these palanquins stood taller than a person, and based on extant depictions they may have been between 3.5 and 4 m high (computed on the basis of average male stature at 1.6 m and female stature of 1.5 m). These typically represent standing deities, with arms outstretched, often braced at the front on vertical supporting poles, thereby forming an open construction to frame the regal seat, with the king literally leaning onto the effigy for support. In symbolic terms, the standing deity would be seen to guard over and embrace the seated ruler, as though providing both divine protection and backing.

The existence of these effigy palanquins has been known for some time (see Jones 1987:108), but it was not until the work of Simon Martin (1996) and Stephen Houston (1998:338–340) that their significance was properly understood. Some of the best depictions are known from the carved wooden lintels of Tikal, particularly those of Temples 1 and 4. On Lintel 2 of Temple 1 we see Jasaw Chan K’awiil I (r. AD 682–734), the ruler of Tikal, seated on one such effigy palanquin. The platform is decorated with stylized plants and symbols that make reference to the semi-arid and montane environment of central Mexico. The deity that rises behind the ruler and offers blessings is none other than Waxaklajuun Ubaah Kaan “Eighteen are the Heads of the Snake,” the Maya name of a well-known martial entity, drawn from the pantheon of Teotihuacan (Helmke and Nielsen 2017). As such, we see the ruler of Tikal on his palanquin, dressed



**Figure 11.** The Naranjo palanquin captured in AD 744, as depicted on Lintel 2 of Temple 4 from Tikal; note the outline of the hummingbird beak that perforated a flower at the nose of the great standing deity effigy, which has since spalled off (photography after Maudslay 1889-1902:3:Pl. 72, courtesy of the Trustees of the British Museum).

as a warrior with the trappings of war, replete with shield and atlatl darts, making effusive reference to Teotihuacan as the ancient and paramount urban center (Taube 1992a:68-74).

In another scene, rendered on Lintel 3 of Temple 1, the Tikal king is seated below the outstretched paws of a large Waterlily Feline. The accompanying text makes it clear that this depiction is tied to a decisive warfare event in which the troops of Calakmul's king, Yich'aak K'ahk' (r. AD 686-696+) were summarily defeated. The Tikal king is thereby represented triumphantly on the captured palanquin, and this close association with war makes it clear that rulers were borne onto the battlefield with their protective deities (Martin 1996; Stone and Zender 2011:99).

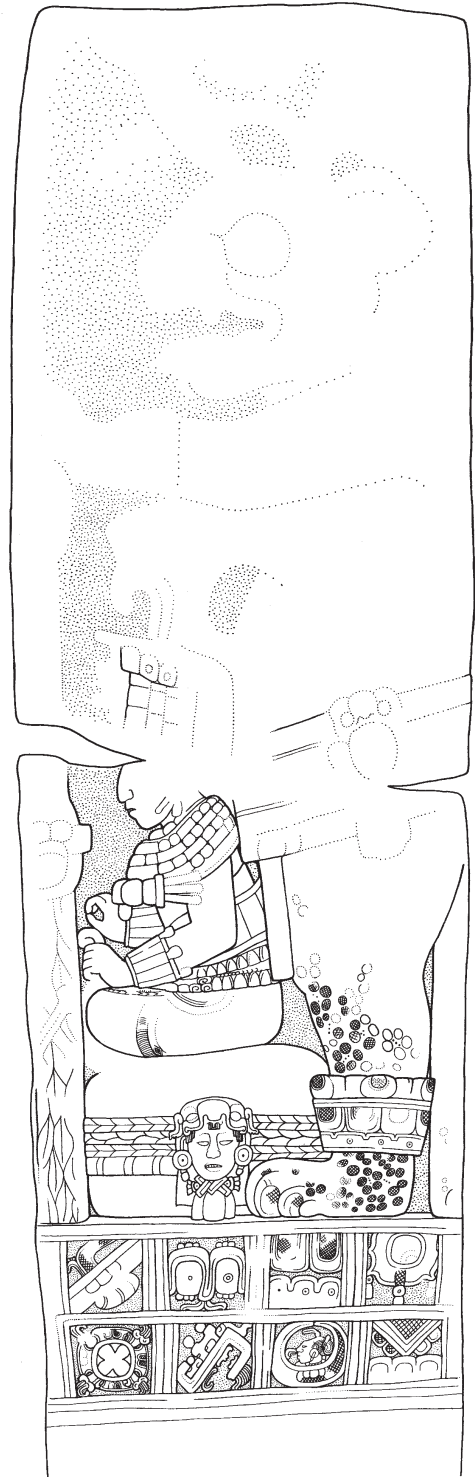
Defeat, at times therefore entailed not only the seizure of a foreign adversary, brought to the capital of the victor bound in ropes, but also of the adversary's palanquin. This is made evident in the depictions and texts of Temple 4 at Tikal, where the victorious Yik'in Chan K'awiil (r. AD 734-746+) is shown seated on the palanquin of a lord of El Peru, seized in battle in AD 743 (Martin 1996). The text makes it clear that the king was borne triumphantly through Tikal on this palanquin at a later date, making the analogy to the Roman triumphal processions that followed the return of victorious armies to Rome all the



more significant (e.g., Versnel 1970).

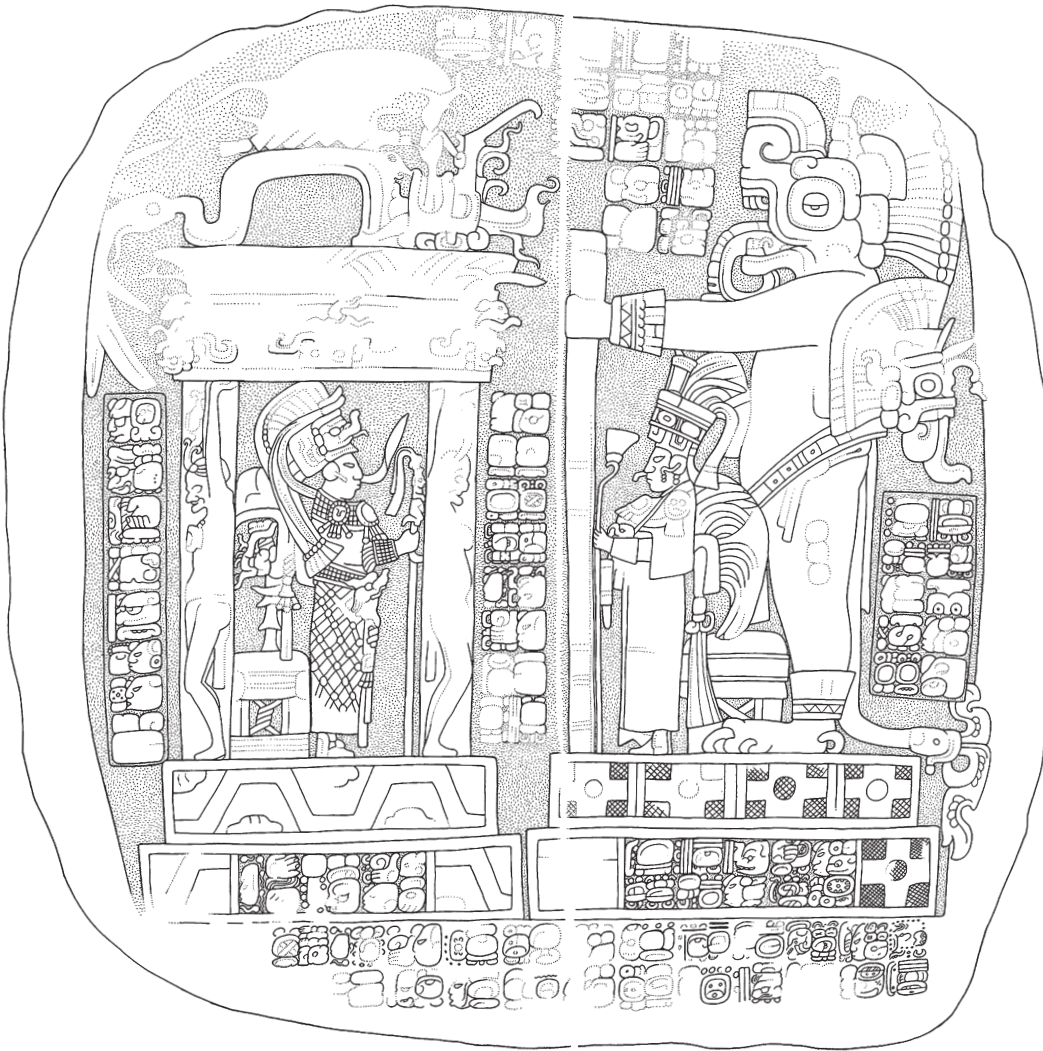
Another revealing example shows Yik'in Chan K'awiil, the following year in AD 744, once more seated on the captured palanquin of an adversary, in this case that of the Naranjo king, captured in a surprise attack on Maya New Year's day (Helmke in press; Zender 2005a:14) (Figure 11). With this defeat, the dynasty of Naranjo was thrown into disarray and Yax Mayuy Chan Chahk, the Naranjo king, is eventually depicted, bound and prostrate at the feet of his adversary, on Stela 5 at Tikal (Martin 1996:231). The depiction of this palanquin, on Lintel 2 of Temple 4 at Tikal, is particularly interesting since it portrays the patron deity of Naranjo as a melding of several creatures, including an anthropomorphic male entity exhibiting features of the so-called Jaguar God of the Underworld—a nocturnal aspect of the sun connected to fire (Schele and Miller 1986:50-51). These features include the ears of the spotted feline, the triangular clusters of dots on his body, the twisted cruller above the nasal arch, and a broad and pointed shell beard marked with signs for *kab* "earth." On his cheek he bears the numeral seven, probably cueing part of his name, and he wears the woven headdress of the youthful wind deity, known as God H (Helmke and Awe 2016:12-13; Taube 1992b:57-58, 2004:73-74), topped by a royal diadem. Although not well preserved, a long and pointed beak, or better said a bill, once extended from the nose and perforated a small flower. This is the characteristic manner of representing hummingbirds in Maya art (Stone and Zender 2011:208-209) and as such indicates that the anthropomorphic feline creature also exhibited features of the bellicose Trochilidae. These identifications are confirmed by the associated glyphic text that mentions the defeat of Naranjo by the forces of Tikal and provides a lengthy epithet for this palanquin. As understood at present, this name can be transcribed as *tz'unuun piit ... saak pilip k'in hix ihk' huun*, or "hummingbird palanquin ... seed ..., sun feline, black headdress." Interestingly, this text specifically refers to this litter as a "hummingbird palanquin," making it clear that this was one of the primary identifiers, although as preserved today this is less visible in the associated iconography. This is of course rather paradoxical, and to some extent even amusing, given the great stature of the deity effigy and considering the rather diminutive size of hummingbirds. Following the lengthy name of the palanquin, the text supplies the segment *u-k'uh-uul yax mayuy chan chahk*, or "it is the god of Yax Mayuy Chan Chahk." Thus, the deity effigy was somehow deemed to be the god itself, and one that was personally owned by the king of Naranjo. To capture the palanquin of an adversary was thus to seize the protective and personal deity of an opposing king. To be borne triumphantly on such a palanquin would thereby signal that the deities of the adversary smiled on the victor and may therefore have been integrated into the local pantheon of deities (Helmke and Awe 2016:2-3).

In addition to the use of these large palanquins in times of war, we can also see that kings made use of them at their own capitals as part of ceremonial processions and as part of highly ritualized meetings between different courts. At Piedras Negras for instance we see Ruler 4 (r. AD 729–757) enthroned on his palanquin in AD 741 (Martin and Grube 2008:148), with a large Waterlily Feline closely guarding the king, the basal platform marked with a skyband that defines this as a celestial object (Stuart and Graham 2003:53-54) (Figure 12). In the text of Stela 8 at Dos Pilas, the enthronement of king Shield K'awiil in AD 698 may be recorded as having taken place "on the back of a palanquin" (Andres et al. 2014:59). On the Dallas Altar, now known to stem from the site of La Corona in Guatemala (and currently designated as La Corona Panel



**Figure 12.** The innovative design of Stela 10 at Piedras Negras showing Ruler 4 seated on his palanquin (after Stuart and Graham 2003:53; drawing by David Stuart © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, PM# 2004.15.6.19.32).





**Figure 13.** Panel 6, La Corona, now in the collections of the Dallas Museum of Art (drawing by David Stuart, after Stuart 2013).

6), we can see two female individuals interacting with one another, across the space between their respective palanquins (Martin 2008; Stuart 2013) (Figure 13). The one on the left is the queen of La Corona, originally hailing from Calakmul and daughter to the ruling monarch, Yukno'm ... Took' K'awiil (r. AD c. 702–731), standing on her palanquin at the commemoration of the Period Ending of AD 731. The base of her palanquin is marked with aquatic elements, the structure formed by lanky and aged Atlantean figures, whose knees are bent by the weight of the celestial roof that they bear (Houston 1998:354, Fig. 18; Martin 2015:190, Fig. 6). The roof is embellished with a row of feathers and the prominent effigy of the Waterlily Monster, the personification of splashing water (Coltman 2015; Stuart 2007). Taken together, the palanquin of the queen thereby seems to present a cosmogram in miniature, with the aquatic underworld below and the heavens above. The woman on the right may be her predecessor, who likewise hailed from Calakmul, but who journeyed south to La Corona for marriage more than two centuries earlier,

in AD 520 (Stuart 2013). This queen stands proudly and faces her homologue below the embrace of a large feline creature—probably a puma whose facial features are embellished with the stylized features of a Teotihuacano butterfly—which wears the mask of the Storm God at the small of the back (see Wrem Anderson and Helmke 2013). Together these once more suggest that the protective deity is a Maya emulation of an earlier Teotihuacan entity.

### Palanquins in Maya Writing

In the glyphic texts, references to “palanquin” are made by the use of a logogram that is a stylized depiction of a small throne, topped by a cushion and the sign **AJAW**, which although unread in this context, serves to indicate that this is a royal litter (Stone and Zender 2011:98–99). The reading proposed for this sign as *piit* was suggested by Dmitri Beliaev (in Stone and Zender 2011:234 n. 35), based on Yucatek sources that provide a cognate form as well as the phonetic complement *-ta* found in several





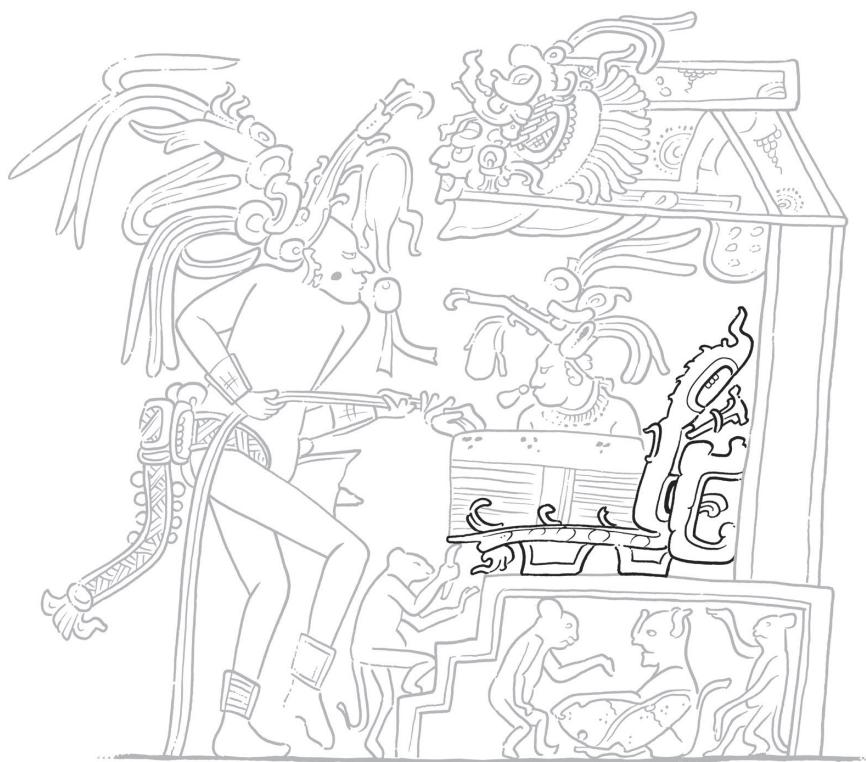
**Figure 14.** The logogram *PIT* ~ *piit*, “palanquin” in Classic Maya writing: (a) Monument 1, Tipan Chen Uitz; (b) Altar 12, Caracol; (c) Lintel 2, Temple 4, Tikal. Numbered palanquin titles: (d) Drawing 6, Naj Tunich; (e) Stela 1, Sacul; (f) Drawing 9, Naj Tunich (drawings by Christophe Helmke).

instances (Figure 14a–c).

The same logogram is also found in syntactical constructions that have been understood as “palanquin events,” presumably specific journeys made by kings to other kingdoms, by means of palanquins, to foster alliances and diplomatic ties between different courts. For instance, on Altar 12 at Caracol, the text relates one such event in AD 819, wherein Tum Yohl K’inich of Caracol journeyed to Ucanal (27.5 km distant to the northwest) to hold a meeting, possibly the one depicted in the imagery of the altar, involving the warlord Papamalil (Grube 1994:95–96). Just 103 days later, the king of Naranjo, Waxaklajun Ubah K’awil is likewise said to have traveled by palanquin to Ucanal (33 km distant to the south-southwest), to meet the same Papamalil, and on his impressive Stela 32, the king of Naranjo is represented on the very palanquin that he journeyed on. The importance of these meetings is made clear by their being referred to in these Terminal Classic texts and is symptomatic of the times, since alliances were one of the means by which the remaining figures of power were able to negotiate and sue for continued stability.

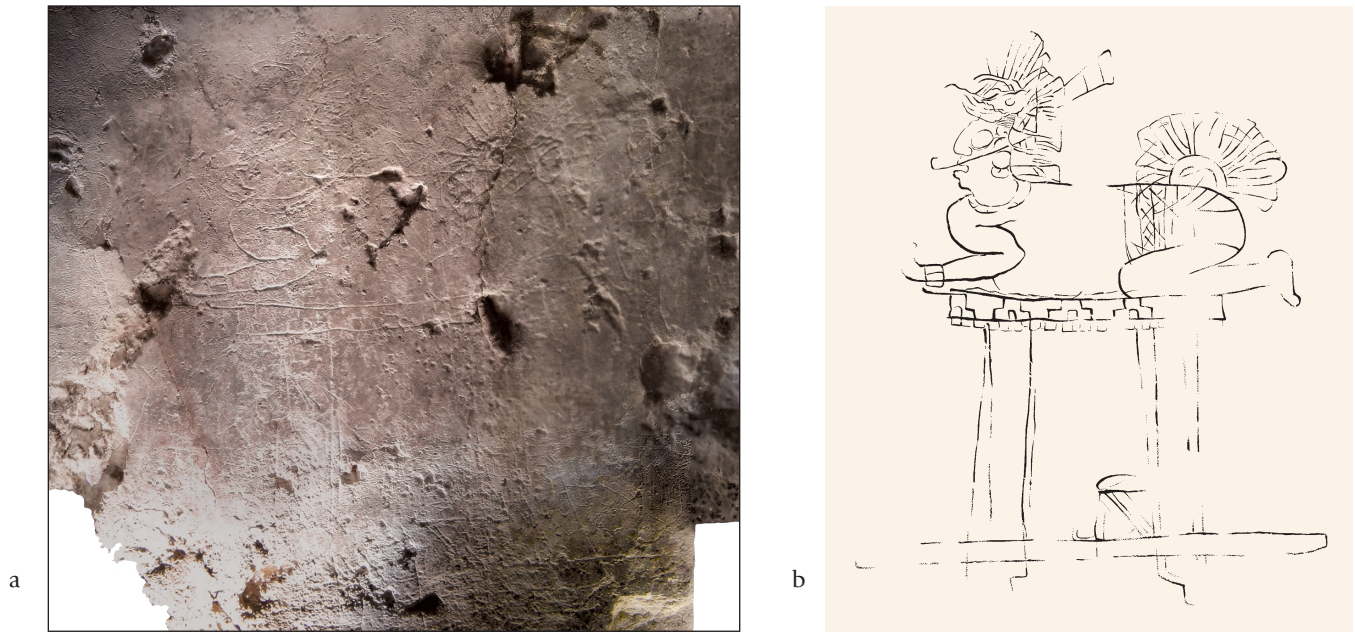
As a lexeme, in addition to naming particular palanquins as we have seen in the texts of Tikal, when prefixed by a numeral these could be used as titles. Thus we see references to *wak piit*, “six palanquin” (El Palmar, Hieroglyphic Stair 1), *waxak piit*, “eight palanquin” (Sacul, Stela 1), and *baluun piit*, “nine palanquin” (Naj Tunich, Drawing 25) (Figure 14d–f). Comparable titles are also found in the texts of Naranjo, Seibal, Tikal, and Calakmul, where these may label particular royal individuals as to the number of palanquins in their possession.

This also raises the question of where these large and imposing vehicles were stored when not in use. One intriguing depiction of a palanquin, formed as the gaping maw of a serpentine creature, is shown on one vase as part of a palatial scene (K8526). The monarch holds court while seated on his palanquin, which has been set in front of a structure adorned with the head of the great celestial bird. What may be the same palanquin is depicted on another vase (K1377) as though stored away within the superstructure of a temple, adorned by the great celestial bird on its facade. In this context, the palanquin may have functioned as the focal point of ritual devotion, tended to by human figures and small animals assuming a human gait (Figure 15). As palanquins relate to the built environment, an intriguing text adorning the sides of the large Monument 1 at Tipan Chen Uitz in central Belize may label this slab as an emulation, skeuomorph, or stone simulacrum of a palanquin (Andres et al. 2014:58–60). Alternatively, it may have been designed as



**Figure 15.** Detail of polychrome vase K1377 showing what may be a palanquin stored within a temple, being tended to by anthropomorphic figures and small animals (drawing by Christophe Helmke).





**Figure 16.** (a) The photogrammetric template used as a basis for drawing the Tulix Mul palanquin (model by Lars Kjær and Christophe Helmke); (b) drawing of the palanquin represented in graffiti Group 6 at Tulix Mul (drawing by Christophe Helmke).

the place to station a palanquin within a royal palace in such a way that the ruler could preside over events while peering down from the palatial complex.

### The Tulix Mul Palanquin in Context

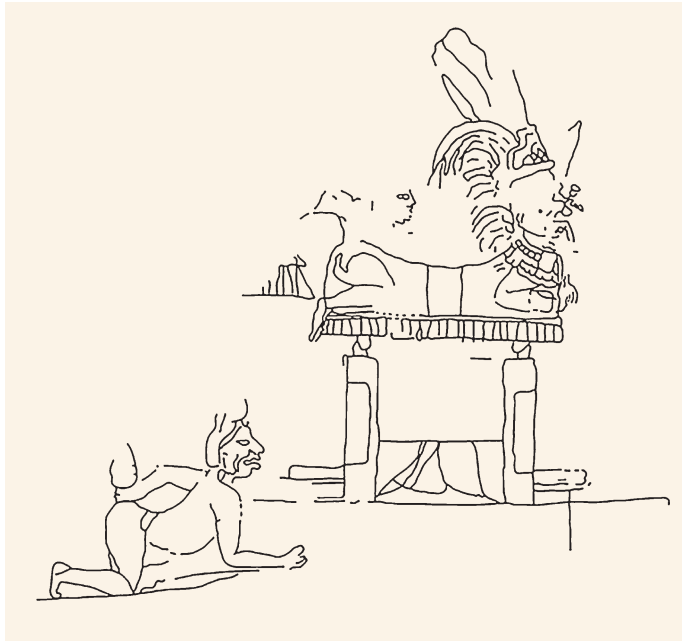
With this review of palanquins in Classic Maya imagery and writing, we can return to that represented in the graffiti of Tulix Mul to search for its identity. Recognizing the importance of the figurative graffiti at Tulix Mul we decided to collate all the photos of Group 6 together into a photogrammetric model, generated by AgiSoft PhotoScan, with the assistance of the Digital Humanities Laboratory at the University of Copenhagen. This was then exported for visual analysis and to produce basic templates upon which the drawings were produced (Figure 16a), whereas a 3D artificial texture model was processed in Sketchfab to more clearly segregate the original plaster surface from the secondarily incised graffiti. This has yielded surprising amounts of detail and has enabled us to produce a detailed drawing of the scene representing the palanquin as well as additional secondary details that may not be part of the original scene (Figure 16b).

Whereas palanquins are represented, as we have seen above, on formal monuments such as the Tikal lintels, the Piedras Negras stela, and the altar of La Corona, there are also several polychrome depictions on ceramic vessels, and by far the most prevalent may be the depiction of these royal vehicles in graffiti. In fact, at least seventeen examples are known to be represented in the graffiti of Tikal (Triak and Kampen 1983: Figs. 19a,

41m, 66e, 71d, 72, 73, 80a, 81a, 82b), whereas an additional half-dozen are known from the sites of Caracol (Str. B20-2<sup>nd</sup>), Nakum (Str. Q), Río Bec (Strs. 7N2 and 6N1), and Yaxha (Str. 375) (Žračka 2014: 125-128, Pls. 37-40, 76b). What is interesting about these, in addition to their great number, is that the depictions found at Tikal duplicate in great detail the grand effigy palanquins that are also depicted on the lintels of the great temples (Schele and Mathews 1998: 90-91). Yet the graffiti are found in buildings other than the temples that house the lintels themselves, and for the most part these graffiti embellish the walls of structures that postdate the lintels. Thus the general consensus is that the graffiti must be the product of individuals who actually saw these palanquins paraded through the city of Tikal as part of ceremonial occasions, in some cases decades after these had been captured from the enemy (Schele and Mathews 1998: 91-92; Žračka 2014: 127-128). In addition, the intrasite distribution of these graffiti do indeed lend themselves to the possibility that they depict actual palanquins, since they are preferentially found in palatial structures that overlook the great plazas. Therefore we may be able to draw the same conclusion for Tulix Mul, that the palanquin depicted there was seen by the person who engraved the wall. This is a very exciting observation since there is a means of identifying the particular palanquin in question.

The litter depicted at Tulix Mul is a relatively simple palanquin, essentially a diminutive structure enclosing a small cushioned seat, and probably not appreciably larger than the monarch it was meant to shelter. As is typical of this category of palanquin, it is supported by





a



b



c

**Figure 17.** Analogous depictions to the Tulix Mul palanquin: (a) graffiti on the east wall of Room 6 of Structure Q at Nakum (drawing by Katarzyna Radnicka); (b) polychrome bowl K7716 of Naranjo, dated to the early seventh century; (c) rollout photograph of the same bowl (photographs © Justin Kerr).

two stepped feet, here rendered as halved tau shapes. The carrying poles can also be seen extending on either side of the palanquin, above the supports and sustaining the cushioned seat. Covering the seat is an awning decorated along its perimeter by perforated, stepped merlon forms, with small strips swaying from the edge. The most imposing decoration is the effigy that adorns the roof of the palanquin. It represents a prone anthropomorphic figure, with a pronounced abdomen, the head and shoulders thrust upward like a figurehead. The figure wears a relatively simple kilt and belt assemblage of woven materials from which a spray of feathers emerges, as well as a bracelet, a necklace, an earspool, and a feathered headdress with otherwise indistinct

features. Finally, a small but distinctive line crosses the face and terminates in a small scroll. Smaller elements and human profiles can also be made out around the palanquin, but whether these are part of the primary scene or secondary additions remains unclear. In any case, the palanquin is represented without the seated monarch within and without porters, as if stationary during a respite or stopover, presumably at Tulix Mul itself.

What makes the palanquin of Tulix Mul all the more remarkable is that it shares a number of formal similarities with a graffiti from Nakum (Figure 17a). The Nakum example is in fact one of the clearest analogs to that of Tulix Mul. This example adorned the east wall of



Room 6 within Structure Q, a long and imposing range structure defining the eastern perimeter of the large and acropoline palace at Nakum (Calderón et al. 2006:182; Žračka 2014:126; Žračka and Hermes 2009). The Nakum graffito likewise depicts a simple palanquin, with two supports and visible carrying poles. The awning is likewise decorated with the same fringe of small strips and what seems to be cloth drapery that is folded rather carelessly along the edge of the side panel. Most remarkable of all, however, is the large effigy that decorates the roof, representing the same anthropomorphic figure. Depicted in the same prone position, head and shoulders raised, wearing a large feathered headdress and with the same prominent spray of feathers springing from the lower back. The posture and curvature of the back is also characteristic, forming a very pronounced and curved arch. Based on all of these similarities, both depictions may represent the same palanquin.

Whereas these two graffiti show the palanquins at rest, the particulars of the scenes differ in the details, since the Nakum example also depicts a small crouching figure who seems to be in the process of administering himself an enema. Whether this was part of the festive occasion that accounted for the presence of the palanquin in the first place, emulative enthusiasm for, or even derogatory emulation of, the effigy depicted on the palanquin (note the similar poses) remains an open question. Nevertheless, there can be little doubt that both graffiti, despite the large distance that separates the two sites, are depictions of the same palanquin.

The identity of the particular palanquin is resolved by its depiction on a polychrome bowl, photographed by Justin Kerr (Kerr and Kerr 2000:1003) (Figure 17b). The shape and decorations of the bowl are characteristic of ceramics produced in royal workshops of Naranjo under the patronage of the long-reigning king Ajasaaj Chan K'inich (r. AD 546–615+) (see Martin and Grube 2008:71–72; Reents-Budet et al. 1994).<sup>1</sup> This assignment

is confirmed by the glyphic text along the rim that ascribes this king ownership of the bowl. In this particular case, the king is styled as a *chan winakhaab ajaw*, or “four-k’atun king,” indicating that he must have been over 60 years of age, and thereby dating the bowl to the first decades of the seventh century. On this vessel we see the palanquin at rest, without its occupant, behind a small throne structure, topped by a year sign and the head of a supernatural entity (perhaps serving as a temporary field throne as it were) (Figure 17c). Seated on the throne is a figure painted in black who faces a group of individuals, as part of the royal audience. The tightly packed row at the back appear to be warriors. The seated figures in front of them have been interpreted as captives that are being presented to the king (Justin Kerr, personal communication 2000), yet these could be courtiers who belong to the same group as the warriors. Four standing figures appear to interact more directly with the seated king, holding fans and insignia of rank, as well as gesticulating and holding a hand up as if in a sign of appeasement. The exact nature of the interaction is difficult to ascertain, but may represent the king of Naranjo interacting with warriors and courtiers of a foreign court. As such, we may be witnessing the types of negotiations that long-distance travel by palanquin would have entailed, since roadways intersected many different polities along the way.

The palanquin of Ajasaaj Chan K'inich as represented on the bowl shares striking similarities to the graffiti seen at Tulix Mul and Nakum. These are all smaller palanquins, comprising the same small structure with decorated awnings and a large anthropomorphic effigy decorating the roof. On the bowl the effigy exhibits precisely the same pose, lying ventrally, head and abdomen aloft, with a similar headdress and the same characteristic spray of feathers at the back. The figure is rendered on the bowl with black body paint, bracing a circular shield and a large spear. These mark the figure as a uniquely martial one, with the triangular pattern of dots repeated over and over as one of its more characteristic feline features. Most stunning of all are the elongated lips that protrude to form a proboscis resembling the bill of hummingbirds in Maya iconography. Based on comparisons between the various examples, it is thus evident that the small feature along the face of the effigy in the Tulix Mul graffito is also meant to represent the same stylized proboscis or bill.

Together these features make it clear that Ajasaaj Chan K'inich had a palanquin with an anthropomorphic protective deity with feline attributes, connected to war, and with the bill of a hummingbird. As many as fourteen decades separate this depiction of a smaller palanquin with a prone deity effigy from that found on Lintel 2 of Temple 4 at Tikal, where we see a large platform palanquin dominated by an imposing and standing deity effigy. Clearly, at one juncture the kings of Naranjo

<sup>1</sup> The regnal name of this long-reigning monarch requires some comments since he is best known for the partial reading of his name as “Aj Wosal” (Martin and Grube 2000:71). With the discovery of Altar 2 and Stela 45 at Naranjo, we see a more complete form of the regnal name ending in Chan K'inich (Grube 2004:197; Grube and Martin 2004:46–48; Martin et al. 2017). Based on the identification of the logogram **AJ** by Marc Zender (2005b) and a revealing example of the nominal sequence (K7716), it is clear that this agentive logogram does not substitute for the vocalic sign **a** (T12), which usually forms part of the name, but precedes it as a separate prefix. In addition, based on the paleographic observation that the main sign of the name is simply **sa**, the most complete transliteration of the name is **AJ-a-sa-ji**, read *ajasaaj*. Possibly this involves the rare root of the verb “play” (as seen in the compound form *alas* “game, child’s play,” in lowland Mayan languages), and it is followed by the derivational suffix *-aaj* that marks the perfect aspect for transitive verbal expressions. This reading of the name as Ajasaaj Chan K'inich can therefore be translated as “It is the Radiant One (Sun God) Who Has Played in the Sky.”



decided to supersede the smaller palanquin of Ajasaaj Chan K'inich by building a new one with a large standing effigy, which would eventually be captured by Tikal in AD 744. Yet, despite these differences we can see that both the earlier and the later palanquins of Naranjo once bore the same protective deity. That of the eighth century includes *tz'unuun* "humming-bird" and *ihk'* "black" as part of its name, and bears features of the Jaguar God of the Underworld, including the triangular cluster of dots, making the equivalence clear. The connotations of warfare that are patent on the representation of the effigy on the bowl may equally be implicit in the other depictions, since hummingbirds were viewed as inherently martial entities in Mesoamerica (Stone and Zender 2011:90). This is based on keen observation of the behavior of these birds, since the males are highly territorial and aggressive, competing with others of their species to protect sources of nectar, chasing potential competitors away, attacking these, and resorting to mortal collisions. Thanks to the many depictions available to us, we are thereby able to conclude that the palanquin of Naranjo kings, and that of Ajasaaj Chan K'inich in particular, was witnessed and recorded in graffiti at sites as distant from one another as Nakum and Tulix Mul.

### Putting it All Together

What are the implications of these observations? There are several, not the least of which is that we are able to track paths of travel and polities visited by Ajasaaj Chan K'inich during his long and influential reign. The depiction at Nakum may be less surprising, since the former is a neighboring polity to the west, with contiguous territory reaching up to that of Naranjo (Helmke and Žračka 2013). We also know that Naranjo maintained some relations with Tikal during this period (see Schele and Freidel 1990:177-178), thereby possibly explaining a westward journey from Naranjo (Helmke and Žračka 2013). The graffiti of Tulix Mul is an unexpected find, considering that Tulix Mul is about 91 km from Naranjo, and it suggests that Ajasaaj Chan K'inich travelled this far to the north on his way to yet another polity, his final destination. Yet based on the contemporaneity of the graffiti—given the dating of its architectural context—with the reign of Ajasaaj Chan K'inich, this is a remarkable concurrence. Taking into account the overall bearing of travel (north-northeast), and the position of Tulix Mul along the Alacranes Bajo, it seems highly plausible that the travels of the Naranjo king would bring him even farther northwards. In fact, the capital of the Snake kings during his reign was established at the site of Dzibanche, a further 83.5 km to the north along the same bearing, in what is now Quintana Roo (see Martin and Velásquez García 2016). The texts of Naranjo also make it clear that Ajasaaj Chan K'inich was a fervent and loyal vassal of the Snake kings. On account of the longevity of his reign, he is known to have sustained the reigns of at least four consecutive overlords, spanning from Tuun K'ab Hix to Scroll Serpent (see Martin and Beliaev 2017:4-5; Martin and Grube 2008:104-106). The finely incised texts on the sides of Stela 1 at Naranjo also make it clear that the accession of Ajasaaj Chan K'inich took



Figure 18. Dos Pilas Panel 6 (photograph by Merle Greene Robertson).

place in AD 546 under the auspices of the Snake king Tuun K'ab Hix (Martin and Grube 2000:72). Given all these many connections between the Naranjo king and the lords of Dzibanche, the Tulix Mul graffiti thereby appears to represent a witness to a particular journey from Naranjo, to the north, via the Holmul Valley and onwards along the Río Azul to the Río Hondo, and fording it to reach Dzibanche. The particular timing of this journey remains unresolved, but it may have taken place in AD 546, as part of the very ceremony that would see Ajasaaj Chan K'inich elevated as king. Alternatively, it may have taken place as part of the accession ceremonies of one of the Snake kings, with their vassals in attendance at the enthronements. A similar instance is recorded on Panel 7 at Dos Pilas, wherein the local lord is said to have witnessed the enthronement of the Snake king Yich'aak K'ahk' in AD 686 (Houston 1993:139, 140, Fig. 5.11) (Figure 18).

Although graffiti are often overlooked by researchers, this particular example makes it clear that this art form also provides fleeting glimpses of the past, with particular events and situations that are not typically represented in the lofty and orthodox royal iconography. The representation of the palanquin of Ajasaaj Chan K'inich at Tulix Mul allows us to witness a particular event, the



pausing of the royal progress at the site, sometime in the mid-sixth to early seventh century. As this event greatly defied the quotidian, it prompted response and commemoration, albeit humble, in the graffiti of Tulix Mul. This greatly helps to flesh out the particulars of the history connecting these courts, as well as the lives and times of great kings. The connection between Naranjo and sites such as Tulix Mul and Nojol Nah in northwestern Belize is made all the more palpable when considering the ceramics that have been found at the sites. Thus, many Naranjo-style ceramics begin to appear during the Tepeu 1 ceramic complex, and ties to northern sites affiliated with the Snake kings are also attested by the appearance of Zacatel Cream-polychrome ceramics as part of the Tepeu 2 complex. Together, the material evidence indicates that the sites of northwestern Belize were an integral part of the corridor of trade and communication that connected the Snake kings in the north with communities of the eastern central lowlands.

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### References

- Andres, Christopher R., Christophe Helmke, Shawn G. Morton, Gabriel D. Wrobel, and Jason J. González  
2014 Contextualizing the Glyphic Texts of Tipan Chen Uitz, Cayo District, Belize. *Latin American Antiquity* 25(1):46-64.
- Anonymous  
2002 Where Palanquin is Still in Use to Display One's 'Class.' *Travel Times*: <http://www.indiatraveltimes.com/special/oct.html>
- 2018 八抬大轿 [bā tái dà jiào]. *Baidu*: [www.baik.baidu.com/item/八抬大轿](http://www.baik.baidu.com/item/八抬大轿)
- Boucher Le Landais, Sylviane  
2014 Vasijas estilo código de Calakmul. Narraciones mitológicas y contextos arqueológicos. *Arqueología Mexicana* 22(128):58-65.
- Brown, William T., Carlos Quiroz, and Hannah Plumer  
2014 Continuing Excavations at El Palacio: Report of the Second Season of Archaeological Investigation of a Multi-Component Elite Maya Residence. In *The 22nd Annual Report of the Blue Creek Archaeological Project*, edited by Thomas H. Guderjan and C. Colleen Hanratty. Report submitted to the Institute of Archaeology, National Institute of Culture and History, Belmopan.
- Calderón, Zoila, Damián Bazy, and Varinia Matute  
2006 *Memoria anual de actividades. Unidad de arqueología local. Sitio arqueológico Nakum, año 2006*. Report submitted to the Instituto de Antropología e Historia, Guatemala.
- Coltman, Jeremy D.  
2015 In the Realm of the Witz': Animate Rivers and Rulership among the Classic Maya. *The PARI Journal* 15(3):15-30.
- García Barriois, Ana  
2011 Análisis iconográfico preliminar de fragmentos de las vasijas estilo código procedentes de Calakmul. *Estudios de Cultura Maya* 37:65-97.
- Greaves, Pieta, and Tom Guderjan  
2015 Further Investigations at Tulix Mul 2014. In *The 23rd Annual Report of the Blue Creek Archaeological Project*, edited by Thomas Guderjan and Colleen Hanratty. CSSR Research Report 1. Report submitted to the Institute of Archaeology, National Institute of Culture and History, Belmopan.
- Grube, Nikolai  
1994 Epigraphic Research at Caracol, Belize. In *Studies in the Archaeology of Caracol, Belize*, edited by Arlen F. Chase and Diane Z. Chase, pp. 83-122. Monograph 7. Pre-Columbian Art Research Institute, San Francisco.
- 2004 La historia dinástica de Naranjo, Petén. *Beiträge zur Allgemeinen und Vergleichenden Archäologie* 24:195-213.
- Guderjan, Thomas H.  
2004 Public Architecture, Ritual and Temporal Dynamics at the Maya Center of Blue Creek. *Ancient Mesoamerica* 15(2):1-17.
- Guderjan, Thomas H., Colleen Hanratty, Brie Deschenes, Hollie Lincoln, Morgan Moodie, Alexander Parmington, Hannah Plumer, Carlos Quiroz, Justin Telepak, and Marc Wolf  
2016 Understanding Xnoha: Temporal and Spatial Dynamics. *Research Reports in Belizean Archaeology* 13:317-327.



Hammond, Gail

- 2012 The Nojol Nah Settlement Zone Project. In *The 20th Annual Report of the Blue Creek Archaeological Project*, edited by Tom Guderjan and Colleen Hanratty, pp. 41-128. Report submitted to the Institute of Archaeology, National Institute of Culture and History, Belmopan.
- 2013 The Tulix Mul Courtyard Group. In *The 21st Annual Report of the Blue Creek Archaeological Project*, edited by Tom Guderjan, pp. 142-226. Report submitted to the Institute of Archaeology, National Institute of Culture and History, Belmopan.
- 2014 Continuing Excavations at the Edge of the Alacranes Bajo. In *The 22nd Annual Report of the Blue Creek Archaeological Project*, edited by Tom Guderjan, pp. 441-474. Report submitted to the Institute of Archaeology, National Institute of Culture and History, Belmopan.
- 2016 Ancient Maya Settlement and the Alacranes Bajo: Landscape and Communities in the Three Rivers Region. Ph.D. thesis, University College London, London.

Herbermann, Charles, ed.

- 1913 *Catholic Encyclopedia*. Robert Appleton, New York.

Helmke, Christophe

- in press Tactics, Trophies and Titles: A Comparative Vantage on Ancient Maya Raiding. *Ancient Mesoamerica*.

Helmke, Christophe, and Jaime J. Awe

- 2016 Sharper than a Serpent's Tooth: A Tale of the Snake-Head Dynasty as Recounted on Xunantunich Panel 4. *The PARI Journal* 17(2):1-22.

Helmke, Christophe G. B., Jaime J. Awe, and Cameron S. Griffith

- 2003 El arte rupestre de Belice. In *Arte rupestre de México Oriental y Centro América*, edited by Martin Künné and Matthias Strecker, pp. 97-117. Ibero-Amerikanisches Institut, Indiana Supplement 16. Gebrüder Mann Verlag, Berlin.

Helmke, Christophe, and Jesper Nielsen

- 2017 Of Gods and Rituals: The Religion of Teotihuacan. In *Teotihuacan: City of Water, City of Fire*, edited by Matthew H. Robb, Danica Hodge, and Ann Kalstrom, pp. 130-137. Fine Arts Museums of San Francisco; University of California Press, Oakland.

Helmke, Christophe, and Jarosław Żrałka

- 2013 A Preliminary Overview of the Glyphic Corpus of Nakum, Guatemala. Paper presented at the 3rd Cracow Maya Conference, "Mesoamerican Writing Systems," Department of New World Archaeology, Jagiellonian University, Cracow.

Houston, Stephen D.

- 1993 *Hieroglyphs and History at Dos Pilas: Dynastic Politics of the Classic Maya*. University of Texas Press, Austin.
- 1998 Classic Maya Depictions of the Built Environment. In *Function and Meaning in Classic Maya Architecture*, edited by Stephen D. Houston, pp. 333-373. Dumbarton Oaks, Washington, D.C.

Jones, Christopher

- 1987 The Life and Times of Ah Cacau, Ruler of Tikal, Guatemala. In *Primer Simposio Mundial sobre Epigrafía Maya*, pp. 107-120. Guatemala City.

Kerr, Barbara, and Justin Kerr, eds.

- 2000 *The Maya Vase Book, Volume 6*. Kerr Associates, New York.

MacLeod, Barbara, and Andrea J. Stone

- 1995 The Hieroglyphic Inscriptions of Naj Tunich. In *Images from the Underworld: Naj Tunich and the Tradition of Maya Cave Painting*, edited by Andrea J. Stone, pp. 155-184. University of Texas Press, Austin.

Martin, Simon

- 1996 Tikal's "Star War" Against Naranjo. In *Eighth Palenque Round Table, 1993*, edited by Martha J. Macri and Jan McHargue, pp. 223-236. Pre-Columbian Art Research Institute, San Francisco.
- 2008 Wives and Daughters on the Dallas Altar. *Mesoweb*: [www.mesoweb.com/articles/martin/Wives&Daughters.pdf](http://www.mesoweb.com/articles/martin/Wives&Daughters.pdf).
- 2015 The Old Man of the Maya Universe: A Unitary Dimension to Ancient Maya Religion. In *Maya Archaeology 3*, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 186-227. Precolumbia Mesoweb Press, San Francisco.

Martin, Simon, and Dmitri Beliaev

- 2017 K'ahk' Ti' Ch'ich': A New Snake King from the Early Classic Period. *The PARI Journal* 17(3):1-7.

Martin, Simon, and Nikolai Grube

- 2000 *Chronicle of the Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya*. Thames and Hudson, London.
- 2008 *Chronicle of the Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya*. Rev. ed. Thames and Hudson, London.

Martin, Simon, Alexandre Tokovinine, Elodie Treffel, and Vilma Fialko

- 2017 La Estela 46 de Naranjo Sa'al, Petén, Guatemala: hallazgo y texto jeroglífico. In *XXX Simposio de Investigaciones Arqueológicas en Guatemala*, edited by Bárbara Arroyo, Luis Méndez Salinas, and Gloria Ajú Álvarez, v. 2, pp. 669-684. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal, Guatemala.

Martin, Simon, and Erik Velásquez García

- 2016 Politics and Places: Tracing the Toponyms of the Snake Dynasty. *The PARI Journal* 17(2):23-33.

Maudslay, Alfred P.

- 1889-1902 *Archaeology*. 5 vols. Appendix to *Biologia Centrali-Americana; or, Contributions to the Knowledge of the Fauna and Flora of Mexico and Central America*. R. H. Porter and Dulau, London.

Moholy-Nagy, Hattula, and William R. Coe

- 2008 *The Artifacts of Tikal: Ornamental and Ceremonial Artifacts and Unworked Material*. Tikal Reports 27A. University Museum of Archaeology and Anthropology, University of Pennsylvania, Philadelphia.



- Ono, Sokyo, and William P. Woodward  
1992 *Shinto: The Kami Way*. Charles E. Tuttle Company, Tokyo.
- Plumer, Hannah  
2017 *Health among the Maya: Comparisons across Sites in the Northern Three Rivers Region, Belize*. BAR International Series 2879. British Archaeological Reports, Oxford.
- Reents-Budet, Dorie, Ronald L. Bishop, and Barbara MacLeod  
1994 Painting Styles, Workshop Locations and Pottery Production. In *Painting the Maya Universe: Royal Ceramics of the Classic Period*, by Dorie Reents-Budet, pp. 164-233. Duke University Press; Duke University Museum of Art, Durham.
- Schele, Linda, and David Freidel  
1990 *A Forest of Kings: The Untold Story of the Ancient Maya*. Quill and Morrow, New York.
- Schele, Linda, and Peter Mathews  
1998 *The Code of Kings: The Language of Seven Sacred Maya Temples and Tombs*. Scribner, New York.
- Schele, Linda, and Mary E. Miller  
1986 *The Blood of Kings: Dynasty and Ritual in Maya Art*. Kimbell Art Museum, Fort Worth.
- Šprajc, Ivan  
2008 *Reconocimiento arqueológico en el sureste del estado de Campeche, México: 1996-2005*. BAR International Series 1742. British Archaeological Reports, Oxford.
- Stone, Andrea J., and Marc Zender  
2011 *Reading Maya Art*. Thames and Hudson, London.
- Stuart, David  
2007 Reading the Water Serpent as **WITZ'**. *Maya Decipherment*: decipherment.wordpress.com/2007/04/13/reading-the-water-serpent/  
2013 New Drawing of a La Corona Panel. *Maya Decipherment*: decipherment.wordpress.com/2013/01/23/new-drawing-of-a-la-corona-panel/
- Stuart, David and Ian Graham  
2003 *Corpus of Maya Hieroglyphic Inscriptions, Volume 9, Part 1, Piedras Negras*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.
- Taube, Karl  
1992a The Temple of Quetzalcoatl and the Cult of Sacred Warfare at Teotihuacan. *Res: Anthropology and Aesthetics* 21:53-87.  
1992b *The Major Gods of Ancient Yucatan*. Dumbarton Oaks, Washington, D.C.  
2004 Flower Mountain: Concepts of Life, Beauty, and Paradise among the Classic Maya. *Res: Anthropology and Aesthetics* 45:69-98.
- Thompson, J. Eric S.  
1950 *Maya Hieroglyphic Writing: Introduction*. Publication 589. Carnegie Institution of Washington, Washington, D.C.
- Trik, Helen, and Michael E. Kampen  
1983 *The Graffiti of Tikal*. Tikal Report No. 31. University Museum Monograph 57. University Museum, University of Pennsylvania, Philadelphia.
- Tsukamoto, Kenichiro, and Octavio Q. Esparza Olguín  
2015 Ajpach' Waal: The Hieroglyphic Stairway of the Guzmán Group of El Palmar, Campeche, Mexico. In *Maya Archaeology 3*, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 30-55. Precolumbia Mesoweb Press, San Francisco.
- Versnel, H. S.  
1970 *Triumphus: An Inquiry into the Origin, Development and Meaning of the Roman Triumph*. Brill, Leiden.
- Vidal Lorenzo, Cristina, and Gaspar Muñoz Cosme, eds.  
2009 *Los grafitos mayas*. Cuadernos de Arquitectura y Arqueología Maya 2. Ediciones UPV, Valencia.
- Wrem Anderson, Kasper, and Christophe Helmke  
2013 The Personifications of Celestial Water: The Many Guises of the Storm God in the Pantheon and Cosmology of Teotihuacan. *Contributions in New World Archaeology* 5:165-196.
- Zender, Marc  
2005a The Raccoon Glyph in Classic Maya Writing. *The PARI Journal* 5(4):6-16.  
2005b 'Flaming Akbal' and the Glyphic Representation of the aj- Agentive Prefix. *The PARI Journal* 5(3):8-10.
- Zhang, Yimou  
1988 紅高粱 [hóng gāoliang]. Xi'an Film Studio, Xi'an.
- Żrałka, Jarosław  
2014 *Pre-Columbian Maya Graffiti: Context, Dating and Function*. Alter, Cracow.
- Żrałka, Jarosław, and Bernard Hermes  
2009 Los grafitos prehispánicos de los sitios de Nakum y Yaxha, Petén, Guatemala. Su contexto arqueológico, iconográfico y cronológico. In *Los grafitos mayas*, edited by Cristina Vidal Lorenzo and Gaspar Muñoz Cosme, pp. 133-158. Ediciones UPV, Valencia.